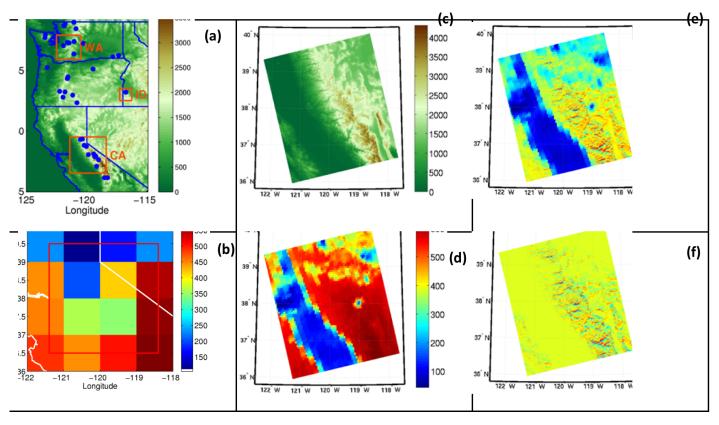


MODIS based high resolution shortwave radiative fluxes on slopes for snowmelt modeling Rachel Pinker, UMD





Net radiative fluxes make up about 80% of the energy balance over snow covered surfaces, shortwave being the dominant component. Therefore, the greatest potential source of error in simulating snowmelt rates and timing is related to such fluxes. The situation is complicated over mountainous terrain due to slope effects on the radiative fluxes and the heterogeneous distribution of snow. Improved estimates of radiative fluxes on slopes are needed to model accurately the snow melt in such regions.

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